DOCUMENT RESUME

ED 424 288 TM 029 171

AUTHOR Oakerson, Peggy Fast

TITLE Teaching and Assessing Study Skills: A Classroom Study.

PUB DATE 1993-10-00

NOTE 14p.; Paper presented at the Annual Meeting of the Midwest

Association of Teachers of Educational Psychology (Anderson,

IN, October 1993).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *College Students; *Educational Assessment; *Evaluation

Methods; Grade Point Average; Higher Education; Pretests

Posttests; *Study Skills; Test Wiseness

IDENTIFIERS *Learning and Study Strategies Inventory

ABSTRACT

A study skills course was evaluated for effects on results from the Learning and Study Strategies Inventory (LASSI) (D. Mealy, 1988). Subjects were students in a freshman level college study skills course. At pretest, there were 29 students in the treatment condition, and by the post-test 25 students remained. In a followup telephone survey, 21 students participated. Statistically significant differences in pretest and posttest scores were found for Anxiety, Information Processing, Main Ideas, Support Techniques, Self-Testing/Review, Test Strategies, and Preparing for Tests. In addition, providing course work in test strategies was effective in improving grade point average. Scores on the Test Strategies section were significantly correlated to cumulative grade point average. (Contains one table and eight references.) (Author/SLD)

ERIC

Teaching and Assessing Study Skills: A Classroom Study Peggy Fast Oakerson Ball State University

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper presented at the 23rd annual meeting of the Midwest Association of Teachers of Educational Psychology, Anderson, Indiana, October, 1993.



Study Skills

2

Abstract

A study skills course was evaluated for effects upon the Learning and Study Strategies Inventory (LASSI). Statistically significant differences were found for Anxiety, Information Processing, Main Ideas, Support Techniques, Self Testing/Review, Test Strategies, and Preparing for Tests. Further, providing course work in test strategies was effective in improving GPA.



Teaching study skills is a joint activity between instructors and students. Shulman (Wittrock, 1986) posits that human capacities, actions and thoughts all precede, accompany and follow in the learning process. Further, Shulman suggests that these categories foreshadow actual changes in the individual's learning. Thus, teaching is interactive, and its process promulgates learning of a continuous rather than of a discrete nature.

Studies of classroom learning may be pivotal although not necessarily generalizable. Moreover, specific learning situations are important exemplars of practice (Wittrock, 1986). Gage (1978) indicates that a description of a small number of cases is really the first stage of research. The purpose of this study is to yield information on implementation and evaluation of a Study Skills class that can aid any instructor in planning such a course.

The need for effective study skills seems to be widespread among freshman students. Simpson (1984) reports a study of 395 college freshman at a midwestern university that suggests students

a) had a restricted range of study strategies b) could barely explain why a strategy was important to their own learning process c) had one study strategy for most learning tasks regardless of the content area and d) had little idea how to know or check when they were ready for a test. (p. 136)

Such student needs are typical to study skills instructors.

It is crucial to assess needs like those just mentioned early in instruction and to chart progress since student awareness of such deficits is the first stage in remediation.



Regarding instrumentation for needs assessment, use of the LASSI provides information to students about individual strengths and weaknesses and, more broadly, to the instructor for evaluating successes and weaknesses in the course. This study will also evaluate the use of the LASSI in predicting future GPA.

METHOD

Participants

Participants in the treatment condition were students in a freshman level study skills credit course at a midwestern, state supported university. Advisors identified students "at risk" and recommended that they enroll in the course. Students were, on some occasions, referred back to their advisors when they experienced academic difficulties during the semester. At pretest there were 28 students in the treatment condition. By the post-test 25 students remained. In a follow-up telephone survey 21 students participated, and four could not be reached.

All students were in the first or second year of undergraduate study. Three women and one man identified themselves as nontraditional students in the sense they had not gone to college immediately after high school. All grade point averages were at least 2.0 out of a 4.0.

Instrument

The Learning and Study Strategies Inventory (LASSI) was



used to measure pre- and post-performance on the designated study skills. Evidence for reliability for coefficient alpha and test-retest correlations (from three week intervals) and calculated for each of ten scales ranged from .68 to .86 and .72 to .85, respectively (Mealey, 1988).

Ten study factors are measured in an unidentified, multiple choice format that can be completed in about 30 minutes. Instructions for self scoring allow students to score their own LASSI's during the same class session. The final copy yields a profile of strengths and weaknesses. Students scoring below the 75th percentile on the LASSI can benefit from study skills instruction (Mealey, 1988). Nearly all students scored within the course's target range.

The LASSI identifies ten study areas which were used in the course as elaborated here:

- 1) Attitude: Measures outlook and interest
- 2) Motivation: Measures drive, diligence, self discipline, and hard work
- 3) Time Management: Measures adhering to expedience in carrying out academic tasks
- 4) Anxiety: Measures apprehension about school performance
- 5) Concentration: Measures tendency to pay attention to



academic tasks

- 6) Information Processing: Measures interest in acquiring knowledge and in reasoning
- 7) Selecting Main Ideas: Measures choosing key concepts and recognizing important information
- 8) Support Techniques: Measures use of study methods and aids
- 9) Self Testing: Measures reviewing techniques including how to ask and answer questions at part of class preparation and, ultimately, of test preparation
- 10) Test Strategies: Measures understanding of test methods and preparing for tests

An advantage to use of the LASSI is that results are readily available and quickly understood by both student and instructor. Each of the ten categories is clearly defined in the booklet. Self-scoring, simply explained, yields a profile of scores for the ten categories, a copy for the student and a copy for the instructor. The instrument's design lends itself to classroom use.

Treatment

The Study Skills course was a one semester, 3 hour credit course. The texts were <u>Study Techniques</u> by Annis (1983) and <u>College Study Skills</u> by Shepherd (1990). This course exposed



the students to study skills such as reading techniques, time management, exam preparation and mnemonic techniques. The LASSI was taken and discussed in class with consideration of progress from the pre to post administration. A number of self-exploration activities were required in the course, including a library unit paper entitled, "Who Am I, the Person, and Where Am I, the Student?"

Procedure

Each participant filled out a demographics card the first week and completed the LASSI during the first and last weeks of the semester. The LASSI was taken in the regular classroom. During the following fall semester a telephone survey asking updated information about major, grade point average, and specific study skills being used was completed.

RESULTS

Dependent t-tests were computed in order to test for significant improvement between pre and post test scores. Table 1 displays the results of this analysis. The following pre and

Insert Table 1 about here.

post test LASSI scores were not statistically significant:
Attitude, Motivation, Time Management, and Concentration. Lack of
statistical significance is surprising since there was considerable



focus on developmental readings and personalized processing in a combination of activities including the "Who Am I..." paper. activities were intended to motivate and personalize a portion of work for the course and to help each student become focused on his or her own study issues and problems. Thus, statistically signicant differences were expected on the Attitude and Motivation However, differences between the pre and post test sections. scores were found to be statistically significant for six of the LASSI categories: Anxiety, Information Processing, Selecting Main Ideas, Use of Support Techniques, Self Testing and Review, Test Strategies and Preparing for Tests. It is interesting that the Information Processing section was statistically significant when Attitude and Motivation were not. Outlook and stimulus to action would seem prerequisite to the skills implicit in processing information. Nevertheless, information processing is a set of skills especially of value in academia. Weinstein, et al. (1987, p. 8) states this:

Using...our prior knowledge, experiences, attitudes, beliefs, and reasoning skills to help make meaning out of new information is critical to success in educational and training settings. Students who score low on this measure need to learn methods that they can use to help add meaning and organization to what they are trying to learn.

It is possible that the low score on motivation might mean that assimilation of information or personalizing it might have been



more an information processing sort of task, generally a higher order sort of task. Further, personal motivation is a more self-conscious and abstract state of mind. In the active phase of classroom activities and writing assignments, it seems that information processing looms large in the gestalt. Since motivation would seem critical in the learning process, perhaps a unit on motivation and self awareness might be implemented. Motivation is an introspective state. Information processing is the concrete work of academia. Motivation is the attitude that energizes the work. If, in fact, motivation were in the "ground", it is possible that the unit mentioned above could emphasize motivation so the learners could better understand how they were behaving as motivated learners.

Students were fairly resistant to using special techniques until near midterm. On the self testing section, testing and review was the main thrust. "Reviewing and testing one's level of understanding are important for knowledge acquisition and comprehension monitoring" (Weinstein, et al., 1987, p. 9). The textbook, How to Study by Annis, gave students several ways to review and check their own knowledge acquisition and comprehension monitoring. In that regard, the classroom treatment worked. All statistically significant areas (Anxiety, Information Processing, Selecting Main Ideas, Use of Support



Techniques, Self Testing, Review and Preparing for Tests) are strongly related to the knowledge acquisition and comprehension monitoring focus. Finally, the Test Strategies section refers to knowing how to prepare for a kind of performance and how to perform optimally.

Scores on the Test Strategies section were significantly correlated to cumulative grade point average (p=.05) at the end of the course. That is, the higher the score for that category, the higher the grade point average. Thus, providing coursework in test strategies is effective in improving GPA.

Implications for the first finding of significance is the LASSI's measure of instructional success for six of ten course areas. For the second finding grade point average is related to a distinctive set of skills involving how to approach and optimally perform on various types of test items and types of tests. Future classroom studies of study skills courses is recommended to explore effects of a unit on motivation and self awareness upon study skills development and to explore factors predictive of future success in college work. Further, use and evaluation of assessments of study skills such as the LASSI are needed.



Table 1

Mean reported differences in pre and post test LASSI scores.

Variable	x	Standard Deviation	t	Probability
Attitude pretest posttest	31.72 34.36	7.01 6.83	-1.48	.152
Motivation pretest posttest	30.68 33.20	6.59 4.98	-1.77	.089
Time Manage- ment				224
pretest posttest	26.08 27.76	6.41 7.17	-1.01	.324
Anxiety pretest posttest	22.60 27.44	6.11 5.33	-3.48	.002
Concentration pretest posttest	26.20 29.16	6.14 5.96	-1.87	.074
Information Processing pretest posttest	25.12 30.08	5.44 4.96	-6.96	.000
Selecting Main Ideas pretest posttest	16.52 20.36	5.61 3.03	-3.50	.002
Support Techniques pretest posttest	24.64 29.40	4.51 4.61	-5.28	.000
Self Testing pretest posttest	26.36	4.80 4.71	-4.04	.000
Test Strategies pretest posttest	25.32 30.60	6.13 4.33	-3.89	.001



References

- Annis, L. F. (1983). <u>Study techniques</u>. Dubuque, Iowa: William C. Brown.
- Gage, N. L. (1978). <u>Handbook of research on teaching</u>. Chicago: Rand McNally.
- LASSI (Learning and study strategies inventory). (1987). Clearwater, Florida: H&H Publishing.
- Mealy, D. L. (1988). Test review: Learning and study strategies (LASSI). <u>Journal of Reading</u>, <u>31</u>(1), 382-385.
- Simpson, M. L. (1984). The status of study strategy instruction: Implications for classroom teachers. <u>Journal of Reading</u>, <u>28</u>(2), 136-143.
- Shepherd, J. F. (1990). <u>College study skills</u> (4th ed.). Boston: Houghton Mifflin.
- Shulman, L. S. (1986). Paradigms and research programs in the study of teaching: A contemporary perspective. In M. C. Wittrock (Ed.), <u>Handbook of research on teaching, third edition:</u> A project of the american educational research association (pp. 3-36). New York: MacMillan.
- Weinstein, C. E., Zimmerman, S. A., & Palmer, D. K. (1988).
 Assessing learning strategies: The design and development of
 the LASSI. In C. E. Weinstein, E. T. Goetz, & P. A. Alexander
 (Eds.), Learning and study strategies: Issues in assessment,

. Study Skills

12

instruction, and evaluation (pp. 25-39). San Diego: Academic. Implications for classroom teachers.



lokomo, IN 46901

U.S. DEPARTMENT OF EDUCATION

Office of Educational Research and Improvement (OERI) Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Teachi	ng and Assessing Study	Skills: A Classroom Stud	dy	
Author(s):				
Oake Corporate Source:	rson, Peggy Fast	Publication Date:		
oorporate dooree.	•	, concentration		
Ball	State University	October.	1993	
. REPRO	DUCTION RELEASE:			
announce in microfi (EDRS) oi the follow	ed in the monthly abstract journal of the ERIC che, reproduced paper copy, and electronic/or other ERIC vendors. Credit is given to the sying notices is affixed to the document.	nd significant materials of interest to the educational system, <i>Resources in Education</i> (RIE), are usually noptical media, and sold through the ERIC Document source of each document, and, if reproduction relationships the countent, please CHECK ONE of the following options and the contraction of the solutions	nade available to user t Reproduction Servic ease is granted, one o	
*	Sample sticker to be affixed to documen	nt Sample sticker to be affixed to document		
Check here Permitting nicrofiche 4"x 6" film),	"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY	"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY	Permitting reproduction	
aper copy,	Same	sample	in other than	
lectronic, nd optical media eproduction	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."	paper copy.	
	Level 1	Level 2		
Sign Here, Document the results to		d reproduction quality permits. If permission to rep d at Level 1.	produce is granted, bu	
indicated above. Resystem contractors	eproduction from the ERIC microfiche or ele	ter (ERIC) nonexclusive permission to reproduce the actronic/optical media by persons other than ERIC der. Exception is made for non-profit reproduction response to discrete inquiries."	employees and its	
Signature.		Position:		
Yeggy tast (Malsen		Graduate Assistant		
Printed Name	EACT PANTOCAN	Otganization		
### ### Address:	1-11181 111/1 ERESCITO	Ball State University Telephone Number:		
	st Drive, Apt. #F	(765) 457-9962		

August 13, 1998